

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

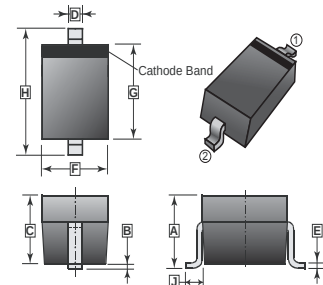
FEATURES

- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering : 250°C for 10 Seconds at Terminals
- Low Forward Voltage

MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any

SOD-123



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.95	1.35	F	1.40	1.80
B	0.10	REF.	G	2.55	2.85
C	1.05	1.15	H	3.55	3.85
D	0.30	0.78	J	-	-
E	0.08	0.25			

MARKING CODE

BM

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

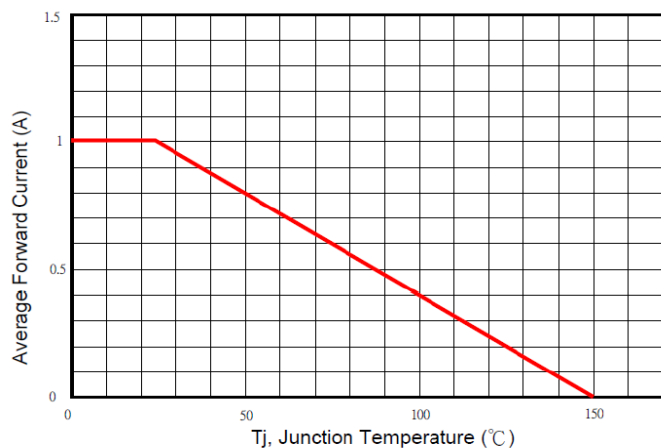
Parameter		Symbol	Ratings	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	40	V
Working Peak Reverse Voltage		V_{RWM}	40	V
Maximum DC Blocking Voltage		V_R	40	V
Average Forward Current @ $T_J=25^\circ\text{C}$		$I_{F(AV)}$	1	A
Peak Forward Current @ 8.3 ms Half Sine		I_{FSM}	10	A
Maximum Instantaneous Forward Voltage	$I_{FM} = 1\text{ A}, T_A = 25^\circ\text{C}$	V_F	0.52	V
	$I_{FM} = 1\text{ A}, T_A = 125^\circ\text{C}$		0.45	V
Maximum DC Reverse Current At Rated DC Blocking Voltage	$T_J = 25^\circ\text{C}$	I_R	0.1	mA
	$T_J = 125^\circ\text{C}$		5	mA
Typical Junction Capacitance ¹		C_J	160	pF
Typical Thermal Resistance ²		$R_{\theta JA}$	310	°C/W
Operating Temperature Range		T_J	-40~125	°C
Storage temperature		T_{STG}	-50~150	°C

Notes:

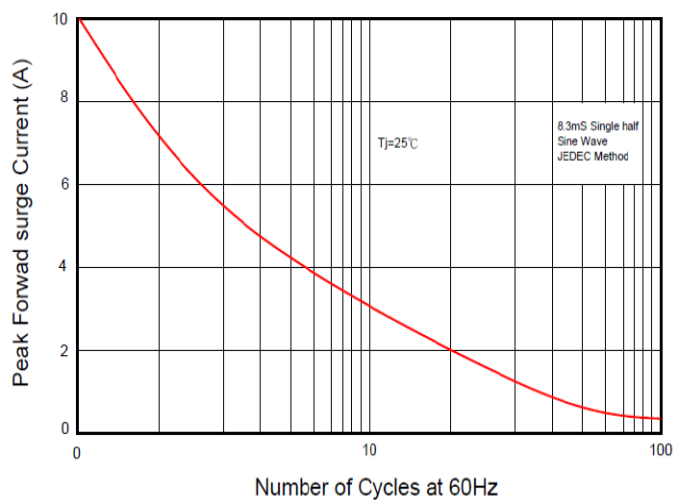
1. Measured at 1MHz and applied reverse of 0V DC.
2. FR-4 PCB, 2 oz. 0.7mm x 1.2mm copper pad.

RATINGS AND CHARACTERISTIC CURVES

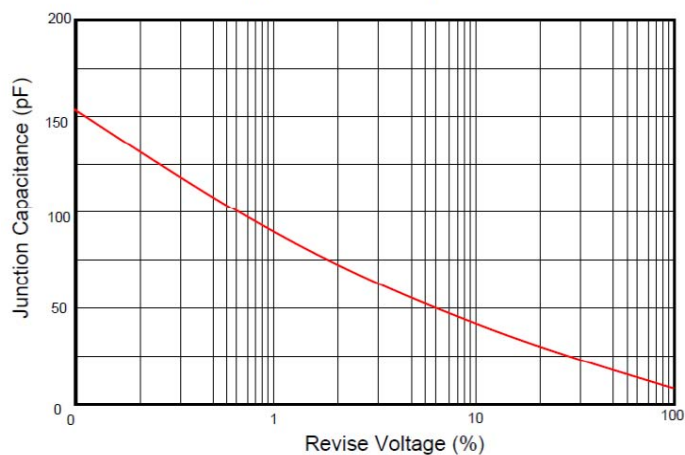
Typical Forward Current Derating Curve



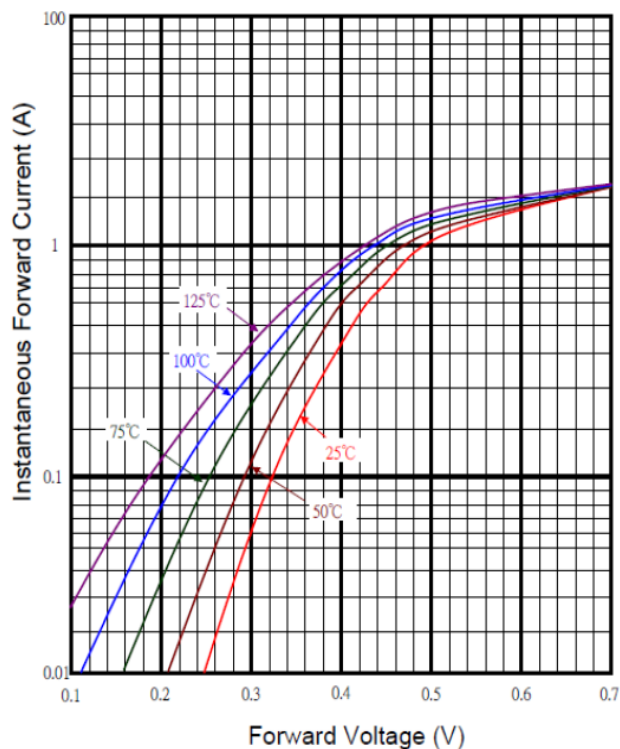
Maximum Non- Repetitive Forward Surge Current



Typical Junction Capacitance



Typical Forward Characteristic



Typical Reverse Characteristic

